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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,521	11/28/2003	Christopher M. Warnock	EBRY003	8904
22862 GLENN PATE	7590 12/20/200° NT GROUP	EXAMINER		
3475 EDISON	WAY, SUITE L	RASHID, DAVID		
MENLO PARK, CA 94025			ART UNIT	PAPER NUMBER
			2624	
			MAIL DATE	DELIVERY MODE
			12/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

r	Application No.	Applicant(s)				
	10/724,521	WARNOCK ET AL.				
Office Action Summary	Examiner	Art Unit				
	David P. Rashid	2624 •				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period value of the reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tinuity will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. (D) (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 9 No	<u>vember 2007</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)☐ This	This action is FINAL. 2b) This action is non-final.					
·— ··	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-32 is/are pending in the application. 4a) Of the above claim(s) is/are withdray  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-32 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on 09 November 2007 is/a  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	re: a)⊠ accepted or b)⊡ objec drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 11/20/2007.	4) Interview Summan Paper No(s)/Mail D 5) Notice of Informal 6) Other:	oate				

### **DETAILED ACTION**

All of the examiner's suggestions presented herein below have been assumed for examination purposes, unless otherwise noted.

#### **Amendments**

1. This office action is responsive to the claim and specification amendment received on 11/9/2007. Claims 1-32 remain pending.

#### **Drawings**

2. The replacement drawings were received on 11/9/2007 and are acceptable. In response to applicant's drawing amendments and remarks, the previous drawing objections are withdrawn.

#### Specification

3. In response to applicant's specification amendments and remarks received on 11/9/2007, the previous specification objections are withdrawn.

### Claim Objections

4. In response to applicant's claim objections amendments and remarks received on 11/9/2007, the previous claim objections are withdrawn.

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## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1-4, 8, and 10-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor et al. (US 5,848,184 A).

Regarding claim 1, Taylor discloses a method (FIG. 1) of analyzing an image ("IMAGE" in FIG. 1) including text ("LIST OF TEXT REGION LOCATIONS" in FIG. 1), the method comprising:

mapping an image ("geometric page segmentor" in Col. 2, lines 61 – 66; FIG. 1, element 34) to determine regions of text (FIG. 1, element 26; "LIST OF TEXT REGION LOCATIONS" in FIG. 1; FIG. 4);

analyzing portions of the image in accordance with characteristics of selected regions of the text to develop a desired ordering ("logical page organizer" in Col. 3, lines 2-7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) of at least the selected regions in accordance with a textual relationship between the selected regions ("expected layout" in Col. 2, lines 53-57).

Regarding claim 2, Taylor discloses the method of claim 1 wherein the image includes a complex textual format ("newspaper page" in Col. 3, lines 2-7) having one or more articles of text (FIG. 4), such as found in a newspaper or magazine page, and the desired ordering is related to the order in which the selected regions are to be presented in a different format appropriate for a specific use ("...correct reading order of the text blocks..." in Col. 4, lines 50-52).

Regarding claim 3, Taylor discloses the method of claims 1 or 2 wherein the desired ordering of the regions ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) includes a preferred order of words in said selected regions (the selected text regions contain words in "preferred order" since they are "readable").

Regarding claim 4, Taylor discloses the method of claims 1 or 2 wherein the desired ordering of the regions ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) is appropriate for use by a human reader (FIG. 1, element 26 introduces OCR recognized as "a form which is human readable" in Col. 1, lines 38 – 43).

Regarding claim 8, Taylor discloses the method of claims 1 or 2 wherein the desired ordering of the regions ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) is appropriate for use by a word processor (FIG. 1, element 26 introduces OCR that "supports a myriad of uses such as editing/reformatting..." in Col. 1, lines 34 – 38 which is the work of a "word processor").

Regarding claim 10, Taylor discloses the method of claims 1 or 2 wherein the analyzing ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) further comprises:

developing a frameset of frame (FIG. 8, elements 1 through 11) and sub-frame areas (FIG. 8, elements 10, 11) of the image ("IMAGE" in FIG. 1) each including related regions of text.

Regarding claim 11, Taylor discloses the method of claims 1 or 2 wherein the analyzing ("logical page organizer" in Col. 3, lines 2-7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) further comprises:

identifying groups of regions of text related to textual articles ("lead article" in Col. 3, line 2-7) and sub-articles (all other articles that are not the "lead article").

Regarding claim 12, Taylor discloses the method of claims 1 or 2 wherein the analyzing ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) further comprises:

ordering regions ("...correct reading order of the text blocks..." in Col. 4, lines 50 – 52) within a textual article (textual article being FIG. 4; text blocks are FIG. 8, elements 1 through 11).

Regarding claim 13, Taylor discloses the method of claims 1 or 2 wherein the analyzing ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) further comprises:

identifying groups of regions of text (boxed-in areas of FIG. 4) related to textual articles (textual article being FIG. 4); and

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ordering regions ("...correct reading order of the text blocks..." in Col. 4, lines 50 - 52) within textual articles.

Regarding claim 14, Taylor discloses the method of claims 1 or 2 wherein the analyzing further comprises:

normalizing ("Normalizing" is described in the examined specification as checking word "rectangles and expands or contracts them so that they butt against each other vertically and horizontally". FIG. 3 shows normalization of the textual image with the text region borders using RSLA (Col. 6, line 64 – Col. 7, line 7).) the textual image ("IMAGE" in FIG. 1).

Regarding claim 15, Taylor discloses the method of claims 1 or 2 wherein the analyzing ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) further comprises:

columnizing (Col. 5, lines 34 – 55; FIG. 1, element 18; FIG. 2 through FIG. 4 wherein "columnization" is shown for the columns) the textual image ("IMAGE" in FIG. 1).

Regarding claim 16, Taylor discloses the method of claims 1 or 2 wherein the analyzing ("logical page organizer" in Col. 3, lines 2-7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) further comprises:

regionalizing (FIG. 5) the textual image ("IMAGE" in FIG. 1).

7. Claims 17-23, 25-29, and 31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Wang et al. (US 5,680,479 A).

Regarding claim 17, Wang discloses a system (FIG. 1) for analyzing an image including text (FIG. 2), comprising:

means for mapping (FIG. 14 – FIG. 16) an image (FIG. 10) to determine regions of text (text regions boxed in FIG. 10 (e.g. region element 98, 101, 102, 104, 106 in FIG. 10 that turn into region elements 124, 121, 122, 121, 121 respectively)) by extracting quads (some boxes in FIG. 13 are dedicated to sole words from FIG. 10 (e.g. element 125 and those boxes in chart 123)) from said image (FIG. 10) and assigning said quads to said regions (the word box quads are in the regions);

wherein each said quad comprises a bounding rectangle of an individual word (e.g. element 125 and those boxes in chart 123 are individual words) in said image (FIG. 10);

means for analyzing portions of the image in accordance with characteristics of selected regions of the text to develop a desired ordering (FIG. 3, element S301; Col. 18, lines 22-30) of the selected regions in accordance with a textual relationship between the selected regions ("TEXT" and "TEXT LINE" which could be quads in FIG. 14 – FIG. 16 as shown in FIG. 13 (e.g. element 125 and those boxes in chart 123 are individual words)).

Regarding claim 18, Wang discloses the system of claim 17 wherein the image (FIG. 10) includes a complex textual format having one or more articles of text (FIG. 10 has a "complex" textual format having one or more articles of text), such as found in a newspaper or magazine page, and the desired ordering is related to the order in which the selected regions are to be presented in a different format appropriate for a specific use (Col. 8, lines 10-19).

Regarding claim 19, Wang discloses the system of claim 18 or 19 wherein the desired ordering of the regions (FIG. 3, element S301; Col. 18, lines 22-30; "TEXT" and "TEXT LINE"

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which could be quads in FIG. 14 – FIG. 16 as shown in FIG. 13 (e.g. element 125 and those boxes in chart 123 are individual words)) includes a preferred order of words (the selected text regions contain words in "preferred order" since they are "readable") in said selected regions.

Regarding **claim 20**, Wang discloses the system of claims 18 or 19 wherein the desired ordering (FIG. 3, element S301; Col. 18, lines 22-30; "TEXT" and "TEXT LINE" which could be quads in FIG. 14 – FIG. 16 as shown in FIG. 13 (e.g. element 125 and those boxes in chart 123 are individual words)) of the regions is appropriate for use by a human reader (the ordering is "appropriate" for use by a human reader as shown in FIG. 13).

Regarding claim 21, Wang discloses the system of claims 18 or 19 wherein the desired ordering (FIG. 3, element S301; Col. 18, lines 22-30; "TEXT" and "TEXT LINE" which could be quads in FIG. 14 – FIG. 16 as shown in FIG. 13 (e.g. element 125 and those boxes in chart 123 are individual words)) of the regions is appropriate for use in transferring the text over a network (Col. 8, lines 10-19).

Regarding claim 22, Wang discloses the system of claims 18 or 19 wherein the desired ordering (FIG. 3, element S301; Col. 18, lines 22-30; "TEXT" and "TEXT LINE" which could be quads in FIG. 14 – FIG. 16 as shown in FIG. 13 (e.g. element 125 and those boxes in chart 123 are individual words)) of the regions is appropriate for use in a database (FIG. 1, elements 19, 20).

Regarding claim 23, Wang discloses the system of claims 18 or 19 wherein the desired ordering (FIG. 3, element S301; Col. 18, lines 22-30; "TEXT" and "TEXT LINE" which could be quads in FIG. 14 – FIG. 16 as shown in FIG. 13 (e.g. element 125 and those boxes in chart 123 are individual words)) of the regions is appropriate for use by a search function (function

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responsible for searching touching regions across page in FIG. 17, element S1711; function responsible for searching white space between characters in FIG. 21, element S2101).

Regarding claim 25, Wang discloses the system of claims 18 or 19 wherein the desired ordering of the regions is appropriate for use by a printer (FIG. 1, element 22).

Regarding claim 26, Wang discloses the system of claims 18 or 19 wherein the means for analyzing further comprises:

means for developing a frameset of frame and sub-frame areas of the image each including related regions of text ("FRAME" in FIG. 14 – FIG. 16 as well as everything underneath it in the tree).

Regarding claim 27, Wang discloses the system of claims 18 or 19 wherein the means for analyzing further comprises:

means for identifying groups of regions of text (text regions boxed in FIG. 10 (e.g. region element 98, 101, 102, 104, 106 in FIG. 10 that turn into region elements 124, 121, 122, 121, 121 respectively)) related to textual articles and sub-articles (these are "articles" and "sub-articles").

Regarding claim 28, Wang discloses the system of claims 18 or 19 wherein the means for analyzing further comprises:

means for ordering regions within a textual article (e.g. article element 121 in FIG. 13 is organized as shown from FIG. 11 and FIG. 12).

Regarding claim 29, Wang discloses the system of claims 18 or 19 wherein the means for analyzing further comprises:

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means for identifying groups of regions of text related to textual articles (e.g. article element 121 in FIG. 13 is organized from the groups of regions of text as shown from FIG. 11 and FIG. 12); and

means for ordering regions within textual articles (FIG. 14 - FIG. 16).

Regarding claim 31, Wang discloses the system of claims 18 or 19 wherein the means for analyzing further comprises:

means for columnizing the textual image (FIG. 11, elements 109a, 109b, 109c, 109d).

Regarding claim 32, Wang discloses the system of claims 18 or 19 wherein the means for analyzing further comprises:

means for regionalizing the textual image (the transition from FIG. 11 to FIG. 13 is "regionalizing" the textual image" as shown in FIG. 14 - FIG. 16).

#### Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 5-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor et al. (US 5,848,184 A) in view of Wang et al. (US 5,680,479 A).

Regarding claim 5, while Taylor discloses the method of claim 1 or 2, Taylor does not teach wherein the desired ordering of the regions is appropriate for use in transferring the text over a network.

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Wang discloses a method for character recognition (FIG. 2) that includes wherein the desired ordering of the regions (FIG. 2, element S212; Col. 9, line 65 – Col. 12, line 13) is appropriate for use in transferring the text over a network (Col. 7, lines 26 – 28; FIG. 1, elements 15, 15a, 15b, 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the desired ordering of the regions of Taylor to include being appropriate for use in transferring the text over a network as taught by Wang so that it "...can be embodied in a variety of devices where character recognition processing is desired, such as image processing or image reproducing apparatuses...", Col. 6, lines 49 – 52.

Regarding **claim 6**, while Taylor discloses the method of claim 1 or 2, Taylor does not teach wherein the desired ordering of the regions is appropriate for use in a database.

Wang discloses a method for character recognition (FIG. 2) that includes wherein the desired ordering of the regions (FIG. 2, element S212; Col. 9, line 65 – Col. 12, line 13) is appropriate for use in a database (FIG. 1, element 19 wherein the character dictionary is a database).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the desired ordering of the regions of Taylor to include being appropriate for use in a database as taught by Wang so that it "...can be embodied in a variety of devices where character recognition processing is desired, such as image processing or image reproducing apparatuses...", Col. 6, lines 49 - 52.

Regarding claim 7, while Taylor discloses the method of claim 1 or 2, Taylor does not teach wherein the desired ordering of the regions is appropriate for use by a search function.

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Wang discloses a method for character recognition (FIG. 2) that includes wherein the desired ordering of the regions (FIG. 2, element S212; Col. 9, line 65 – Col. 12, line 13) is appropriate for use by a search function (function responsible for searching touching regions across page in FIG. 17, element S1711; function responsible for searching white space between characters in FIG. 21, element S2101).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the desired ordering of the regions of Taylor to include being appropriate for use by a search function as taught by Wang "...to overcome the foregoing difficulties:", Col. 3, lines 47 - 48 listed from Col. 1, line 34 - Col. 3, line 44.

Regarding claim 9, while Taylor discloses the method of claim 1 or 2, Taylor does not teach wherein the desired ordering of the regions is appropriate for use by a printer.

Wang discloses a method for character recognition (FIG. 2) that includes wherein the desired ordering of the regions (FIG. 2, element S212; Col. 9, line 65 – Col. 12, line 13) is appropriate for use by a printer (FIG. 1, element 22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the desired ordering of the regions of Taylor to include being appropriate for use by a printer as taught by Wang so that it "...can be embodied in a variety of devices where character recognition processing is desired, such as image processing or image reproducing apparatuses...", Col. 6, lines 49 - 52.

10. Claims 24 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (US 5,680,479 A) in view of Taylor et al. (US 5,848,184 A).

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Regarding claim 24, while Wang discloses the system of claims 18 or 19, Wang does not teach wherein the desired ordering of the regions is appropriate for use by a word processor.

Taylor discloses a document page analyzer and method that teaches wherein the desired ordering of the regions ("logical page organizer" in Col. 3, lines 2 – 7; FIG. 1, element 36; "LOGICAL STRUCTURE TREE" in FIG. 1) is appropriate for use by a word processor (FIG. 1, element 26 introduces OCR that "supports a myriad of uses such as editing/reformatting..." in Col. 1, lines 34 – 38 which is the work of a "word processor").

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the system of Wang to include wherein the desired ordering of the regions is appropriate for use by a word processor as taught by Taylor "to provide apparatus and method for interpretation of document structure", Taylor, Col. 2, lines 21-23 and "to provide apparatus and method for automatically putting the text of a document into the correct reading order for a given document page, even for complex layouts, thereby removing the need for a manual operation", Taylor, Col. 2, lines 32-36.

Regarding claim 30, while Wang discloses the system of claims 18 or 19, Wang does not teach wherein the means for analyzing further comprises: means for normalizing the textual image.

Taylor discloses a document page analyzer and method that teaches wherein the analyzing further comprises:

normalizing ("Normalizing" is described in the examined specification as checking word "rectangles and expands or contracts them so that they butt against each other vertically and

horizontally". FIG. 3 shows normalization of the textual image with the text region borders using RSLA (Col. 6, line 64 – Col. 7, line 7).) the textual image ("IMAGE" in FIG. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the system of Wang to include wherein the means for analyzing further comprises: means for normalizing the textual image as taught by Taylor "to provide apparatus and method for interpretation of document structure", Taylor, Col. 2, lines 21-23 and "to provide apparatus and method for automatically putting the text of a document into the correct reading order for a given document page, even for complex layouts, thereby removing the need for a manual operation", Taylor, Col. 2, lines 32-36.

## Response to Arguments

- 11. Applicant's arguments filed on 11/9/2007 with respect to claims 1-32 have been respectfully and fully considered, but they are not found persuasive.
- 12. Summary of Remarks regarding claims 1 and 17:

Applicant has amended independent claims 1 and 17 to define Applicant's invention more clearly in view of the teachings of Taylor. In particular, Applicant now claims: "Applicant image determine regions of text region of text by extracting quads from said image, and assigning said quads to regions; wherein each said quad comprises a bounding rectangle of an individual word in said image...." (response page 14).

The claims as now stated clearly set forth the difference between the claimed invention.

In Taylor and the rejection of 35 U. S. C. 102(b) therefore deemed traversed. Support for Applicant's claimed amendments can be found' in beginning at paragraph [00106] and continuing

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through paragraph [00111]. Supports for the claimed amendments are found elsewhere in the application as well (*response page 15*).

## 13. Examiner's Response regarding claims 1 and 17:

However, the Examiner must state that claim 1 has not been in fact amended to include the same amended limitations as those presented in claim 17 from the response received in 11/9/2007. Claim 1 and its dependants have maintained their original prior art rejection.

Applicant's arguments with respect to claims 17 have been considered but are moot in view of the new grounds of rejection.

## 14. Summary of Remarks regarding 35 U.S.C. 103 rejected dependent claims:

Applicant argues in view of Applicant's amendments to the independent claims, such claims are now deemed to be allowable and the rejection 35 U.S.C. 103 is therefore deemed moot (response page 16).

#### 15. Examiner's Response regarding 35 U.S.C. 103 rejected dependent claims:

However, in view of Applicant's amendments to the independent claims, such claims are not deemed to be allowable and the rejection 35 U.S.C. 103 stands.

#### Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5949555 A; US 6006240 A; US 5701500 A; US 5696841 A.

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17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David P. Rashid whose telephone number is (571) 270-1578.

The examiner can normally be reached Monday - Friday 8:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571) 272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/<u>David P. Rashid</u>/ Examiner, Art Unit 2624

David P Rashid Examiner Art Unit 2624

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